

REMARKS

Claims 1, 10 and 16 have been amended for purposes of clarity and thus reasons unrelated to patentability. Support for the amendment of Claims 1, 10 and 16 appears in the specification at least at page 5, lines 5-18, page 12, lines 2-21.

New Claims 35-37 have been added. Support for Claims 35-37 appears in the specification at least at page 2, lines 33-35 and page 12, lines 4-9.

Claims 1-10, 12, and 14-19 are novel over Sun et al. (U.S. 5,262,353).

The Examiner states:

Sun et al. (Fig 6, 9) discloses a structure comprising a first (16) and a second signal line (16) above a substrate (12) with a **first shield line (20; portion in first trench region) positioned between but separated from said first and second line in an unused substrate surface area, said shielding line electrically floating** (via insulation 18, 22), ... (Office Action, page 2, emphasis added).

However, the Examiner admits:

... Sun discloses **shield layers ... that are connected to a dedicated ground** with a separate line than circuits ... (Office Action, page 4, under "Response to Arguments", emphasis added.)

Consequently, Applicants submit that Sun et al. does not disclose, teach, or suggest, and in fact teaches away from, a structure comprising:

a first signal line;
a second signal line; and
a first shield line positioned between but separated from said first signal line and said second signal line, **said first shield line being unconnected to a voltage source,**

as recited in amended Claim 1, emphasis added.

As set forth in Applicants' specification:

Since the first shield line is electrically floating, electrical connections between the first shield line and a voltage source are not made. Thus, the routing program does not allocate any area for the various reference lines and vias which would otherwise be required to connect the first shield line to a voltage source as in the prior art. Of importance, the routing program uses this saved area for other uses, e.g. for routing of necessary signal lines. In this manner, the efficiency of use of the substrate surface area is increased resulting in higher performance integrated circuits compared to the prior art. (Page 5, lines 6-18, emphasis added.)

Accordingly, Claim 1 is allowable over Sun et al. Claims 2-9, and new Claim 35, which depend from Claim 1, are allowable for at least the same reasons as Claim 1.

Claim 10 is allowable over Sun et al. for reasons similar to Claim 1. Claims 12, 14, 15, and 17-19, and new Claim 36, which depend from Claim 10, are allowable for at least the same reasons as Claim 10.

Claim 16 is also allowable over Sun et al. for reasons similar to Claim 1. New Claim 37, which depends from Claim 16 is allowable for at least the same reasons as Claim 16.

For the above reasons, Applicants respectfully request reconsideration and withdrawal of this rejection.

Claim 11 is patentable over Sun et al. (U.S. 5,262,353).

As noted above, Claim 10 is allowable over Sun et al. Therefore, Claim 11, which depends from Claim 10, is allowable over Sun et al. for at least the same reasons as Claim 10. The Examiner's statement on pages 3-4 of the Office Action about the obviousness of "design choice" and "routine experimentation" relative to the distance between the first and

second signal line does not cure the deficiency in Sun et al. noted above.

Consequently, Applicants respectfully submit that Claim 11 is allowable over Sun et al. in view of the Examiner's statement regarding obviousness.

For the above reasons, Applicants respectfully request reconsideration and withdrawal of this rejection.

As to 37 CFR 1.116

The amendments to the claims are to add clarity in response to the rejections set forth in the Office Action. Therefore, entry of this Amendment requires neither consideration of new issues nor a new search. Further, this Amendment places the application in a condition for allowance. Therefore, entry of this Amendment is appropriate under rule 116.

Conclusion

Claims 1-12, 14-19 and 35-37 are pending in the application. For the foregoing reasons, Applicants respectfully request allowance of all pending claims. If the Examiner has any questions relating to the above, the Examiner is respectfully requested to telephone the undersigned Attorney for Applicant(s).

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22311-1450, on October 31, 2003.

Attorney for Applicant(s)

October 31, 2003
Date of Signature

Respectfully submitted,

Serge J. Hodgson
Attorney for Applicant(s)
Reg. No. 40,017
Tel.: (831) 655-0880